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GROUND WATER SAFETY ACT OF 1988

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Mr. BURDICK, from the Committee on Environment and Public Works, submitted the following

REPORT

[To accompany S. 2853]

[Including the cost estimate of the Congressional Budget Office]

The Committee on Environment and Public Works reports an original bill (S. 2853), to amend the Safe Drinking Water Act and the Federal Insecticide, Fungicide, and Rodenticide Act to protect ground water resources from contamination by pesticides, to transfer the liability for pesticide damages in certain circumstances from the user to the registrant, and to preserve the authority of State governments to establish standards for pesticide residues on food and recommends that the bill do pass.

GENERAL STATEMENT

INTRODUCTION

Ground water constitutes 96 percent of all of the available fresh water in the United States and is the primary source of drinking water for half of the general population—nearly 117 million people—and 95 percent of the rural population. As of 1980, the U.S. Geological Survey estimated that about 89 billion gallons a day (bgd) of ground water were withdrawn from wells for several purposes: irrigation (60 bgd), public drinking water supply (12 bgd), self-supplied industrial use (12 bgd), and rural use (domestic drinking water and livestock) (4.5 bgd).

Between irrigation and livestock usage, about two-thirds of the daily supply of ground water used in the United States is for agricultural activities. But those very agricultural activities have also introduced contaminants that threaten ground water quality, limit-

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ing its usefulness as a source of drinking water and for other purposes. In 1985, 38 States reported that agricultural activity was a known or suspected source of ground water contamination within their borders. The most commonly found or suspected ground water pollutants in the States tended to be from agricultural sources: 38 reported nitrates (fertilizers), 24 reported bacteria (animal wastes), and 21 reported pesticides (herbicides and insecticides). And the most affected group is the rural population, 95 percent of which obtains its drinking water from ground water that is for the most part untreated prior to consumption.

No nationwide surveys of ground water quality have been made. Consequently, what is known about the extent of contamination from agricultural activities is largely anecdotal, but it does provide an indicator of the potential seriousness of the problem.

As of 1985, EPA reported that 17 pesticides had been detected in the ground water of 23 States; the contamination was considered caused by normal usage of the pesticides according to label requirements. Federal drinking water standards exist for only 6 pesticides, including none of the 17 found. The Agency anticipates that additional pesticide monitoring will reveal more locations where pesticides have entered ground water supplies.

As of March 1985, 57 pesticides had been found in California ground water, contaminating 2,887 wells. DBCP, a soil nematicide now banned because it is an animal carcinogen and has been linked to male sterility, was found to be responsible for contaminating 2,449 wells throughout the State. Sixty percent of the DBCP-contaminated wells had concentrations exceeding 0.001 mg/l (1 part per billion), a level considered by EPA to cause 150 additional cases of cancer per million people exposed continuously over their lifetimes.

As of February 1984, over half of 8,404 wells tested on Long Island for aldicarb, an insecticide and nematicide shown to cause enzyme inhibition in animals, were found to have traces of the compound. Twenty-seven percent of the contaminated wells had aldicarb concentrations greater than 0.001 mg/l (1 part per billion); over 2,000 homes with concentrations exceeding the New York recommended drinking water standard of 0.007 mg/l (7 parts per billion) received activated carbon filters for their water systems from the pesticide manufacturer.

The State of Minnesota Department of Public Health recently completed a test of 750 public and private drinking water wells. They found pesticides in 38 percent of the wells tested. 11 herbicides and 3 insecticides were detected in the drinking water wells and in five percent of the cases at levels exceeding health-based action levels or standards.

Studies in Iowa indicate that 25 percent of all ground water supplies contain some amount of pesticide and that in areas with vulnerable geology, 70 to 90 percent of all farm wells have been contaminated. In a high percentage of cases several pesticides are detected in a single well.

Recently the U.S. Department of Agriculture released a report indicating that the water supply for 50 million Americans is at risk of contamination from pesticides used in agriculture. 767 counties in the United States have a combination of vulnerable ground

water and moderate to high pesticide use which together put the drinking water supply at risk. Those counties occur in every region of the Nation.

The Safe Drinking Water Act of 1974 addresses the protection of drinking water in public water systems. It authorizes EPA to set maximum contaminant levels permitted for drinking water pollutants, whether in surface water or ground water sources, in public water systems (serving at least 25 people or having at least 15 service connections). The Act has no authority over private or rural systems, which are regulated (if at all) by State and local authorities. Regarding agricultural contaminants, Federal drinking water standards have been set for nitrates, bacteria, and six pesticides (although many more pesticides have been found in drinking water supplies than are currently regulated in the Act). Amendments to the Act in 1986 provide for the promulgation or revision of standards for 83 drinking water contaminants (many of which are pesticides) over the next 2–3 years and for elective State ground water programs to protect sole source aquifers and wellhead areas from contamination.

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), last amended in 1978, establishes a comprehensive system for manufacturers to register the use of pesticides (no Federal laws apply directly to the use of fertilizers). Under the Act, EPA has the authority to suspend or cancel the registration of a pesticide if it is determined to cause unreasonable adverse environmental effects. EPA has recently proposed an agricultural chemical strategy to protect ground water resources from pesticide contamination.

Summary of Legislation

Section 1 of the bill provides that the legislation may be referred to as the "Ground Water Safety Act of 1988".

Section 2 of the bill amends the Safe Drinking Water Act (SDWA) and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to establish a program to be administered by the Environmental Protection Agency in coordination with the States to protect the ground water resources of the Nation from contamination by pesticides. This section of the legislation has eight major provisions:

First, at the time a pesticide is registered, EPA must determine whether it has the potential to leach into ground water, and if so, a series of requirements will be imposed on the manufacturer of the pesticide. The determination that a pesticide has the potential to leach is made based on information to be submitted by the manufacturer.

Second, EPA must set a protection standard under the Safe Drinking Water Act for all pesticides with the potential to leach to ground water. This standard is called a ground water residue guidance level. It is a numerical standard designed to protect public health and the environment. The purpose of the program is to prevent pesticide concentrations in ground water from exceeding these standards.

Third, the manufacturer of a pesticide with the potential to leach must develop best management practices which will minimize the

likely impact of the pesticide on ground water quality. These management practices are not label requirements, but are recommendations to the users on steps that can be taken to prevent contamination.

Fourth, the manufacturer must conduct monitoring at a representative number of sites where the pesticide will be used, so that any leaching will be detected at the earliest possible date. In addition, if the pesticide is detected at a particular site, the manufacturer may be required to do intensive monitoring at that site to determine the extent of the contamination.

Fifth, if the pesticide is detected in ground water at any point in concentrations exceeding 25 percent of the standard, EPA must reconsider the label requirements and modify the label adding further restrictions on use if such restrictions would be necessary to prevent the standard from being exceeded. These restrictions may include limitations on the rate and timing of application, methods of application, training for the applicator, and so on.

Sixth, if the pesticide is detected at any site in concentrations exceeding 50 percent of the standard, EPA and the State in which the detection occurs are to take site-specific responses necessary to protect public health which may include alternative water supplies for families affected. The State has 90 days to act and failing State action, EPA is to respond where the contamination is to a drinking water well. EPA or the State may require the manufacturer of the pesticide to provide alternative water supplies.

Seventh, EPA, USDA, and other agencies of the Federal Government are to establish a joint program to make pesticide and ground water information more readily available to farmers, county extension agents and State officials. The data would include information on the fate and transport of a pesticide when applied, information on the soil at specific sites, information on climate, and information on the ground water resource at specific sites, for instance the depth to the water table, the flow rate and direction of ground water in the region, and so on.

Finally, each State is to develop a pesticide management program to protect ground water supplies from contamination by pesticides used in that State. The programs are to be supported by EPA grants. Beginning 4 years after enactment, pesticides which are found to have the potential to leach into ground water may not be used in States which have not adopted programs, except that a pesticide may be used if it is registered for emergency use according to section 18 of FIFRA.

Section 3 of the bill provides a conditional exemption for agricultural producers from liability under Federal environmental laws for releases of pesticides into the environment. In order to qualify for the exemption, producers must 1) certify that they complied with labeling instructions and applicable law, 2) include in the certification information relating to the use of the pesticide, and 3) beginning three months after enactment, keep records of the certifications contemporaneous with each pesticide application.

The exemption does not apply to any producer who acted negligently, recklessly, or not in accordance with the labeling instructions or applicable law. In cases where the producer is exempted from liability, the bill imposes liability on the registrants of the

pesticide and ingredients in the pesticide, as well as continuing liability on any person otherwise responsible under existing Federal law. Liability is defined as the obligation to respond to contamination or threatened contamination of ground water.

Section 3 expressly states that the exemption does not affect liability under any State or Federal law, other than Federal environmental laws, nor does it affect provisions of Federal environmental laws that authorize the prohibition or other limitations on the use of a pesticide. The provision also does not confer or restrict private rights of action.

Section 4 of the bill provides authority for the regulation of storage and disposal of pesticides which have been banned under FIFRA because of adverse effects on human health or the environment. Pesticide registrants will be required to develop safe methods for the storage and disposal of pesticides before they are registered or reregistered. The Environmental Protection Agency is authorized to establish specific requirements for the storage and disposal of banned pesticides either by rule-making or by order at the time the pesticide is banned. EPA and the registrant are to share the cost of storage according to a formula contained in the bill. Pesticide stocks which are hazardous wastes are to be disposed according to the provisions of subtitle C of the Solid Waste Disposal Act.

Section 5 of the bill includes an amendment to the definition of pesticide under FIFRA. The purpose of the amendment is to assure that fertilizer products which contain antimicrobial agents intended for pesticidal purposes are not required to be registered under FIFRA, if the antimicrobial agent is already registered for that use.

Section 6 of the bill affirms existing law by explicitly stating that States and municipal subdivisions retain authority under the Federal Food, Drug, and Cosmetic Act to establish and enforce regulatory limits on residues of pesticides in or on food, so long as the limits are at least as stringent as limits established by the Federal Government.

Section 7 of the bill provides for an EPA study of abandoned production and injection wells to determine any impact which such wells may have on ground water quality, the extent and regional distribution of the abandoned well problem, and the efficacy and cost of various approaches to closing and capping abandoned wells.

Discussion of Intent

Section 1. Short Title

The bill may be cited as the "Ground Water Safety Act of 1988".

Section 2. Pesticides in Ground Water

Purpose

The bill is intended to protect ground water from contamination in a variety of ways and the resource protected is broadly defined. Protection is afforded not only to current drinking water sources, both public and private wells, but also to any other waters which may serve to meet drinking water needs or for other purposes in the future.

DEFINITIONS

The definition of "underground sources of drinking water" in this legislation is similar to the definition that is used in current EPA regulations for the underground injection control program. The definition includes two considerations, one with respect to well yield and the other with respect to water quality. To be an underground source of drinking water, an aquifer or portion of an aquifer must be able to yield a sufficient quantity of water to a well to meet daily needs. Yield is, of course, a function of the depth of the well and also of the permeability of the geologic formation. Water that is above the zone of saturation in the root zone would not generally be a potential source of drinking water because it may not yield a sufficient quantity of water to meet daily needs, about 50 gallons per day per person. Likewise, and considering that the water table at any site may rise and fall seasonally and over a period of years, water in the zone of saturation that is very near the water table may not, in all circumstances, be considered an underground source of drinking water.

With respect to water quality, this definition, and the definition of underground sources of drinking water in the current EPA regulations, affords an extra margin of protection. Human beings will generally drink water only if the mineral content is less than approximately 500 parts per million total dissolved solids. But the definition of underground sources of drinking water in this legislation includes waters with total dissolved solids up to 10,000 parts per million. Extending the definition to this range provides protection from pesticide contamination for water that might be treated to remove dissolved solids to bring it within the normal range considered appropriate for human consumption and also protects ground water for other uses such as livestock watering where use is not excluded because of the presence of dissolved solids at low levels.

The Administrator may exclude some waters from protection under this Act, if the quality of those waters would not otherwise support drinking water. For instance, ground water containing hydrocarbons in high proportions might be excluded. it is not the intent to exclude waters which are contaminated by nitrates, even if that contamination should substantially exceed the standard for nitrates under the Safe Drinking Water Act, as nitrates may be removed from drinking water using known treatment technologies and may be attenuated naturally.

Any source, whatever the yield of the well, the depth of the well or the quality of the water produced, which is currently used as a drinking water supply would be afforded protection under this legislation.

The definition of "ground water sampling point" indicates that the sampling well should be of an adequate depth to assure the collection of ground water samples. This language does not mean that the sample has to be representative of the quality of all the water in the aquifer. It is not required that one go to a depth of 500 feet in a 1,000-foot thick aquifer to get a representative sample. All that is required is that the sampling well be of depth adequate to sample water that could eventually enter a drinking water well

taking into account the quantity of water that is necessary to meet daily needs.

The term "reliable analytical data" means information on the presence of a pesticide in ground water developed through methodology of sufficient validity and reliability so that a positive indication in a sample can be used for regulatory purposes. To assure this level of quality the definition refers to recognized standards and good laboratory practices. No extraordinary effort to verify or prove contamination is intended.

As used in this legislation the term "pesticide" includes all of the active and inert ingredients and their metabolites and degradation products associated with a pesticide product. It is not necessary under the provisions of this definition that a ground water sample contain ingredients in precisely the same chemical formulation as is found in the pesticide product when it is sold. Because ingredients will be transported and degraded at different rates once they are released into the environment, ground water samples will not match the formulations of the pesticide product in its manufactured form. Therefore, it is necessary to read the use of the term pesticide broadly here to include all of the chemical constituents and byproducts in order to assure adequate protection of ground water resources.

It is not intended by the inclusion of this definition that EPA be required to set a standard for all of the possible degradation products of a pesticide at the time of registration. However, if it is apparent at the time of registration or becomes apparent through use of the pesticide that one or more degradation products are a significant ground water contamination proglem, standards must be established by EPA.

POTENTIAL TO LEACH

An important element of this bill is a requirement that EPA establish criteria to determine whether a pesticide has the potential to leach into ground water. This is an essential element, in order to prevent, rather than simply respond to, ground water contamination. In developing such criteria, the Administrator of EPA is to begin with the factors listed in subsection (c)(1) of the new section 31 which include the intended use of the pesticide, the method used in applying the pesticide, the timing and rate of application, the mobility of the pesticide in water and soil, the persistence of pesticide in the enviroment, the use of pesticide in combination with other chemicals, and the care that is necessary to assure that the pesticide is properly used. EPA has been working to develop such criteria and the purpose of this language is simply to give a legislative affirmation to the work that is already underway.

At the time of registration or at the time EPA proposes a reregistration standard for a pesticide, the Administrator is to determine whether the pesticide has the potential to leach into ground water. The Administrator will require the person proposing to register a pesticide to provide data on the fate and transport of that pesticide in the environment including in ground water in the saturated and unsaturated zone. Based on that information, the criteria that the Administrator has established and other information that may be

available, the Administrator will make a determination whether the pesticide has the potential to leach into ground water.

Any pesticide that has been detected at three or more sampling points is considered to have leaching potential. If at the time of registration, EPA makes a determination that a pesticide does not have the potential to leach, but subsequently, that pesticide is discovered at three or more ground water sampling points, then the determination is to be changed to classify the pesticide as a potential leacher. Contamination at three sampling points resulting from a single release shall not cause a pesticide to be classified as having the potential to leach. In addition, EPA is to revise, as necessary, the criteria, if they are ineffective in identifying pesticides which are subsequently found in ground water supplies.

A determination that a pesticide has the potential to leach into ground water is the first step in prevention of contamination. For this reason, the Administrator should err on the side of protecting human health and the environment and make a determination that a pesticide has no leaching potential only when any other conclusion is unsupportable.

RECOMMENDED PRACTICES

If a pesticide is determined to be a leacher, the registrant of the pesticide is to develop best managment practices which will be effective in preventing ground water contamination. Information on these practices is to be disseminated to the users of the pesticide and to the State agencies which are developing management programs under the new section 32 of FIRFRA. It is important to emphasize the authority of the States to get information from the registrants—including fate and transport data—that would be helpful in developing prevention programs. The management practices to be developed under this new subsection are in addition to the lable requirements which EPA identifies as necessary to assure that the ground water residue guidance level will not be exceeded.

The provisions of this subsection are important to the preventive goals and objectives of the bill. Management practices to prevent contamination have not been included in the other bills and amendments on this subject which have been reported to and considered by the Senate. The information generated and made available as a result of these requirements is to be helpful to the user in managing his or her operations to prevent ground water contamination. It is the means to enable agricultural producers to achieve the goals and objectives of this bill through good stewardship.

MONITORING

Under the provisions of the subsection (e) of the new section 31, if EPA determines that a pesticide has the potential to leach into ground water, then the registrant is required to conduct ground water monitoring with respect to that pesticide. The purpose of the monitoring is to assure that information on the fate of the pesticide in the environment be developed at the earliest possible date. When it is known that a pesticide has the potential to leach to ground water, it is not appropriate to wait for the pesticide to be accidentally discovered by a person monitoring a drinking water

supply for some other purpose, but rather the registrant of the suspected leacher is required to conduct a targeted monitoring program at sites that are representative of the places where the pesticide is used.

It is not intended that the registrant be required to install monitoring wells at all or even a large number of locations. It is only intended that EPA design a reasonable monitoring program for the pesticide to be conducted by the registrant at sites reasonably representative of the crops, climates, soils, and hydrogeology associated with use of the pesticide so as to assure that reliable analytical data will be available at the earliest practicable time should the pesticide, despite label requirements, leach to ground water.

One aspect of the pesticide contamination problem that is especially troubling is the long lag time that may occur between application of the pesticide and the date that it actually is detected in a ground water sample. Contaminants move very slowly in the soil and ground water. It may take years for a pesticide applied on the surface to percolate down to the water table and move to the point of discharge. Because of this long period for transport, pesticides may build up in the soil and, even if the pesticide is banned for use on the surface after the first detection is made in the ground water below, the level of contamination will continue to increase as the built up pesticide moves into the saturated zone. For this reason the bill focuses on provisions that will assure the earliest possible detection of ground water contamination. That is the purpose of the "representative" monitoring provisions included in this subsection.

The "representative" monitoring requirement is one of three new monitoring provisions included in the bill. The other two are "registration" and "remedial" monitoring authorities. Authority to require monitoring exists under the data collection provisions of the existing pesticide law. This new language is simply to clarify the likely conditions under which that authority might be used. "Registration" monitoring may, for instance, be required when EPA is reviewing the registration of a pesticide and needs to determine the human exposure which might be experienced across the Nation. "Remedial" monitoring is to be employed to determine the nature and extent of contamination at a specific site for the purpose of planning response actions. In both cases this monitoring would be conducted by the registrant or registrants of the pesticide.

In addition to the actions legally required here, EPA is also instructed to develop monitoring techniques that do not rely solely on groung water samples. Prevention requires the development and use of techniques that focus on monitoring of the unsaturated zone so that ground water contamination might be predicted even before it occurs. Monitoring technology for the unsaturated zone is not entirely reliable at this time, but EPA should be making every effort in its research and development program to perfect monitoring techniques for the unsaturated zone so that they may be implemented as a part of the FIFRA program and in other ground water protection regimes such as those authorized by the Solid Waste Disposal Act. An authorization for research of this type is provided in the bill.

NOTIFICATION

Registrants are required to notify EPA within 15 working days if a registrant obtains, through its own testing or from any other source, reliable analytical data that a pesticide has been detected at any ground water sampling point. The notification report to EPA is to include information regarding the detection, and circumstances under which the pesticide was detected including information on factors such as well type, soil type, method used, date, information on the accuracy of the method, and quality assurance and control procedures. A second report is required when any detection indicates that a ground water residue guidance level has been exceeded at a specific site.

The registrant is to notify the property owner and any persons relying on the well for drinking water whenever a report is required.

On receiving information through a notification under this subsection (or from any other source) that a pesticide is leaching to ground water, the Administrator is to make a determination as to whether further action is necessary to prevent ground water contamination by the pesticide.

REGISTRATION AMENDMENTS

One of the principal elements of pesticide regulation under FIFRA are the restrictions that are put on the use of a pesticide at the time of registration. Subsection 31(h) of this bill uses these registration requirements which are implemented through instructions on the label of the pesticide to assure that ground water residue guidance levels will not be exceeded. Nothing in this language authorizes the Administrator to register a pesticide that may present an unreasonable risk of injury to human health or the environment as a result of the potential for the pesticide to leach into ground water. The legislation is not designed to authorize the use of leaching pesticides which present an unreasonable risk of environmental harm, but to protect ground water and, thus, the Administrator's authority and current policy to decline to register pesticides that present an unreasonable risk because of the likelihood that they will leach to ground water or for any other reason is not disturbed.

EPA is to include at the time of registration all the restrictions on the use of a pesticide which the Administrator determines are necessary to meet the requirements of the FIFRA statute. It is not intended that restrictions included in the registration or label of a pesticide to protect ground water are only appropriate after contamination has actually been discovered. Rather it is the purpose of this legislation to assure that when the EPA learns that a ground water residue guidance level for a pesticide is likely to be exceeded despite previously imposed restrictions on use, a mandatory duty is imposed on the Administrator to further restrict the use of the pesticide to avoid that result. Again this language is designed to prevent contamination and to assure that the health-based ground water residue guidance levels will not be exceeded.

The bill includes provisions which define the point at which the Administrator is required to impose registration amendments to

protect ground water supplies. This legislation explicitly includes a presumption that a review of the registration of a pesticide will be triggered whenever the pesticide has been detected in an amount which exceeds 25 percent of the ground water residue guidance level for that pesticide in different localities. The 25 percent presumption is a fraction of the health-based standard and is appropriate in this instance because ground water does not thoroughly mix and as a result the quantity of a contaminant at a particular sampling point may vary by as much as an order of magnitude in separate samples drawn from that single site over a short period of time. At one time it may be found that the level of contamination is only 25 percent of the ground water residue guidance levels, but shortly thereafter, perhaps even on the next day, a sample that is contaminated at a level which is two-and-one-half times the ground water residue guidance level may be drawn from the same well. Thus, it would be reasonable to conclude that a ground water residue guidance level might be exceeded, even if a sample or samples indicate contamination at a fraction of the health-based standard established under the drinking water law. Again, as in other public health and environmental protection programs, when there is doubt or uncertainty, EPA is to take all action which may be necessary to protect health and the environment.

In this subsection of the new section 31 of FIFRA the phrase "in different localities" is to indicate that EPA is not required to impose registration amendments because the 25 percent trigger has been exceeded at a single place. There is no need to impose nationally applicable restrictions because of a unique contamination incident. However, the exception is not intended to allow EPA to ignore the first signs of contamination which may result from normal agricultural practices or pesticide use. EPA is not to set an arbitrary trigger based on the number of locations at which contamination has been detected in excess of 25 percent of the ground water residue guidance levels and to delay action until after that number of incidents has been discovered. EPA should impose restrictions even if the 25 percent level has been exceeded at only one site, if at that site the contamination resulted from normal practices which can be expected to result in contamination at other places where the pesticide is used.

The registration amendments required by this section are to be imposed promptly. The procedures for imposing amendments are, in part, specified in the FIFRA statute rather than this bill. EPA is to begin the process by proposing the amendments within 60 days after the 25 percent trigger has been reached and is to proceed with the regulatory process so that the restrictions necessary to protect ground water are effective as soon as practicable thereafter. Although the administrative processes used may be those of FIFRA, it is not intended that the "unreasonable risk" standard of FIFRA be substituted for any part of the determinations that are triggered by the ground water residue guidance levels which are established under the Safe Drinking Water Act.

In addition to the authorities to issue orders and cancel uses which are available under the existing FIFRA statutes, this bill would also allow EPA to impose registration amendments and changes in labeling necessary to protect ground water from pesti-

cide contamination through a rule-making process as provided in the Administrative Procedures Act.

RESPONSE AUTHORITIES

Subsection 31(i) establishes authority for response to ground water contamination at a specific site. Again, the purposes of this section are to assure that the ground water residue guidance level for a pesticide will not be exceeded. Here, EPA and the States are required to take action beyond that required by general and national registration amendments, after EPA or a State receives information that a detection at concentrations exceeding 50 percent of a ground water residue guidance level has been made at a particular ground water sampling point. The legislation in the first instance relies upon the States to take action. States are given 180 days to take steps that will bring and retain the level of the pesticide in any underground source of drinking water to a point that is below the ground water residue guidance level. If a State does not have sufficient authority or fail to act within the 180 day period and if the contamination is detected in a drinking water well, the duty to bring and retain the contamination to a level that is below the ground water residue guidance levels falls upon EPA. The general standard which applies to EPA's actions under this section is one which will protect human health and the environment from adverse effects as a result of the presence of the pesticide in the drinking water well.

The authority for EPA to conduct a response is available immediately. There is no time lag between the date of enactment and the time when EPA may use this response authority. There are thousands of wells across the Nation that are already contaminated with pesticides and it is expected that response to that contamination will begin as soon as ground water residue guidance levels are promulgated under the Safe Drinking Water Act.

Site-specific responses may be very resource intensive. They may include substantial administrative procedure and may be open to challenge and review by all affected persons. To reduce the administrative burden, this bill includes authority to define protection zones on a generic basis. EPA is to promulgate a regulation which includes a formula to determine the land area over which any use prohibition will be effective. The regulation may be subject to judicial review at the time of promulgation but will not be subject to review when it is applied on a site-specific basis. In addition the response actions shall, to the extent practicable, rely on readily available data.

These provisions are intended to respond to the legitimate resource concerns which were raised by EPA during hearings on the bill. But they are not intended to diminish the public health protection afforded by this part of the program. Response authorities have not been limited; administrative process has simply been streamlined.

The Administrator of the Environmental Protection Agency has authority to respond to contamination of drinking water supplies by pesticides pursuant to the provisions of several laws. In addition to FIFRA, the EPA may also respond under the Safe Drinking

Water Act, the Comprehensive Environmental Response, Compensation and Liability Act, the Clean Water Act, the Solid Waste Disposal Act and perhaps other statutes.

These authorities are very broadly drafted and include response actions ranging from the imposition of monitoring requirements to mandating cleanup of a contaminated aquifer. Although the language of this section only makes reference to the specific response authorities of FIFRA, there is nothing in this section which displaces or alters the response authorities that are contained in these statutes or which would suggest that only FIFRA authorities should be used to respond to pesticide contamination of ground water.

Other response authorities should be applied by EPA to incidents of pesticide contamination which come to light as a result of implementing the provisions contained in these amendments. The duty of the Administrator to prevent human exposure to dangerous levels of drinking water contaminants which is contained in the Safe Drinking Water Act is not a duty to be segregated from the responsibilities created here. All of the authorities that have been granted by the Congress to the Environmental Protection Agency should be used in a coordinated way to protect public health from the threat that is posed by pesticide contamination of ground water supplies.

INFORMATION

An additional element of this legislation creates an authority for EPA and other agencies of the Federal Government, including the Department of Agriculture, to enter into arrangements that will make available to individual farmers information that has been collected on soil and climate characteristics that would be helpful to the farmer as he or she makes decisions with respects to the use of a particular pesticide. Much of this site-specific information has already been developed by the soil conservation districts and natural resource agencies of this Nation. This information is to be organized in a way that makes it useful to the farmer as decisions on pesticide uses and application practices are made.

GROUND WATER RESIDUE GUIDANCE LEVEL

One of the principal elements in this legislation is an amendments to the Safe Drinking Water Act authorizing EPA to set health-based standards for pesticides found in drinking water supplies to assure that pesticide contamination does not become a threat to public health or the environment. These new standards are called ground water residue guidance levels.

Authority to establish the ground water residue guidance levels is placed in the Safe Drinking Water Act rather than FIFRA, because the considerations that are to be taken into account when setting a ground water residue guidance level are very similar to those that are employed when setting standards applicable to public drinking water supplies under SDWA. The maximum contaminant level goal in SDWA is base on a level of protection that assures no adverse effect on human health. The ground water resi-

due guidance levels authorized here are to conform to that same standard.

FIFRA is a risk balancing statute. It instructs the Administrator to allow the use of a pesticide where no unreasonable risk of injury to human health, welfare, or the environment can be expected. The Safe Drinking Water Act does not call upon the Administrator to balance the risks and benefits of a pesticide, or any other potential contaminant, in setting standards. It is unlike FIFRA in that respect.

The Environment and Public Works Committee conducted a hearing on these issues in September of 1986. At that hearing every witness—including representatives of EPA, the States, the pesticide manufacturers, the environmental community and farm organizations—testified that the ground water residue guidance level established by this legislation should be solely health-based and that no consideration of the benefits of the pesticide should be taken into account when ground water residue guidance levels are determined.

The ground water residue guidance level is to be consistent with the health protection requirements of SDWA, as specified in the authority of the Administrator to set maximum contaminant level goals under section 1412. This is not principally an aquifer cleanup program or a program for the treatment of contaminated water supplies. Rather it is a prevention program, and as such, it is appropriate that the standard for the ground water residue guidance level parallel to the standard for the maximum contaminant level goal in the Safe Drinking Water Act.

The Administrator is to establish a ground water residue guidance level for a pesticide whenever the Administrator registers or reregisters a pesticide that has the potential to leach into ground water. In addition, ground water residue guidance levels are to be issued if: 1) the pesticide has been detected at ground water sampling points at three different locations; 2) the pesticide has been detected in drinking water wells or wellfields serving more than 500 people; or 3) a Federal agency or the Governor of a State petitions the Administrator to set a ground water residue guidance level for a pesticide.

Based on these criteria, it is expected that ground water residue guidance levels would be established for a large number of pesticides. EPA is now conducting a national survey with respect to pesticide contamination of ground water. As a part of that survey EPA is developing health advisories for several dozen pesticides. It is expected that EPA will be able to use the information in the health advisories to quickly develop the ground water residue guidance levels authorized by this bill.

However, ground water residue guidance levels will not be serving the same purpose as those advisories. Health advisories have been developed by the drinking water office at EPA as an informal mechanism to assist others in preventing short-term exposures that may present an imminent and substantial endangerment to public health. They are not intended to substitute for regulatory standards, nor do they reflect the same considerations as to health protection which the Administrator is instructed to take into account under this legislation.

Here the Administrator is required to establish ground water residue guidance levels that are sufficiently stringent to protect human health, including populations such as children who may be particularly sensitive to pesticide exposure. The Administrator must also take into account other factors which, if present, would indicate that an additional margin of safety in the standard is necessary.

The standard-setting process under the Safe Drinking Water Act begins with health studies (usually animal studies) to determine the concentration of a contaminant in drinking water at which no adverse effect on health will occur. A margin of safety is then added to assure that especially sensitive individuals or groups are protected from adverse effects at lower levels. The maximum contaminant level goal (MCLG) is set at the concentration which assures no adverse effects with a margin of safety. The goal is not an enforceable standard under SDWA, but only a point of departure for determining the enforceable standard.

After setting the MCLG, EPA examines water treatment technologies to determine what level of cleanup is possible for water that is contaminated above the safety level. SDWA instructs the Administrator to set the enforceable standard—the maximum contaminant level (MCL)—as near the MCLG as is feasible using available treatment technologies. In most cases treatment systems can bring all contaminated waters to levels at or below the MCLG. For most of the contaminants for which standards have been set, the MCL and MCLG are the same.

In some cases, MCLs allow concentrations of contaminants higher then MCLGs. This occurs when treatment technologies are not available to bring contaminated water to levels below the safe range. In the case of carcinogens, Federal Government policy is based on the principle that there is no safe level of exposure to cancer-causing agents. Therefore, MCLGs for all carcinogens have been set at zero. EPA has taken the position that treatment and measurement systems are not available to assure that drinking water supplies contain zero carcinogens and has for a series of volatile organic chemicals set standards at levels other than zero.

The legislation reported here is intended to protect currently pristine water supplies from contamination by pesticides. Using the MCL as the standard of protection would in some cases (for all carcinogens, at a minimum) allow contamination above levels which are known to be the threshold for safety. Thus, the general policy adopted in the legislation is to set the ground water residue guidance level at the same level as the MCLG.

EPA has proposed that they be given authority to set a non-zero ground water residue guidance level for carcinogenic pesticides which will be regulated under this legislation. The Agency has proposed the use of risk assessment methods to determine the level at which the concentration of pesticides in drinking water would present no more than a negligible risk. The negligible risk level would then be used as the point of departure for the ground water residue guidance level. This approach produces a result different from the MCL under SDWA, where feasible treatment rather than negligible risk is the narrative standard. (For instance, the MCL

for benzene under SDWA is 5 parts per billion, whereas the negligible risk level is 2.5 parts per billion).

The Committee is reluctant to authorize the use of risk assessment in standard-setting. Risk assessment methods have been the source of substantial and continuing friction between the executive branch and the Congress. It is a complex and uncertain scientific methodology with unsettled results.

Nevertheless, and under very limited circumstances, this legislation authorizes the establishment of non-zero ground water residue guidance levels for carcinogenic pesticides, but only where EPA has adopted a maximum containment level under the Safe Drinking Water Act which presents no more than a one in one million lifetime risk of chronic adverse health effects and the ground water residue guidance level is set at the same level as the MCL. This language should not be read to authorize the use of risk assessment in setting MCLs under the Safe Drinking Water Act. Rather an MCL established according to existing provisions that also reduces lifetime risk of adverse chronic effects (including cancer) to less than one in one million may be used as the ground water residue guidance level for a pesticide with the potential to leach to ground water.

The Environmental Protection Agency has established guidelines for risk assessment which have been published in the Federal Register. These guidelines are to serve as the foundation for any determination that an MCL will not present more than a one in one million lifetime risk of chronic adverse effects (including cancer).

STATE PREVENTION PROGRAMS

This bill icludes a new section 32 of FIFRA which provides that each State will develop a program to prevent contamination of ground water by pesticides.

These programs will focus on best management practices for pesticide uses that prevent contamination of ground water as the result of agricultural practices. Registrants of the pesticides are to provide the States with the information which is necessary to develop these management practices.

EPA will approve the general program that each State develops. The State will then apply its program to each pesticide registered for use in that State which has been determined to have the potential to leach by EPA under section 31. The bill includes criteria for approval of State programs. It also authorizes $25 million per year in grants to the States to develop and implement their programs.

No pesticide which has been identified as having the potential to leach to ground water may be registered after the date 48 months after enactment of this section for use in a State which does not have an approved program, unless such pesticide is granted a temporary registration under section 18 of FIFRA for emergency uses.

Section 3. Liability for Lawful Application

On May 19, 1988, the Senate Committee on Agriculture, Nutrition and Forestry reported legislation, S. 1516, that exempts agricultural producers from liability under Federal environmental laws for the release or threatened release of pesticides into the environ-

ment. S. 1516 explicitly defines Federal environmental laws as including the Comprehensive Emergency Response, Compensation, and Liability Act, the Federal Water Pollution Control Act, the Solid Waste Disposal Act, and the Safe Drinking Water Act, all statutes under the jurisdiction of the Environment and Public Works Committee. In addition, the Federal Insecticide, Fungicide and Rodenticide Act is referenced.

The Agriculture Committee included a liability provision in its pesticide reform bill although there are no known instances of actions under Federal law to compel farmers to pay for damages resulting from pesticide contamination. The Congressional Research Service, in a report ot the Agriculture Committee on potential farmer liability under Federal statutes, noted the following:

> It is worth emphasis that the analysis in this memoradum is almost entirely hypothetical. We find no reported decisions involving liability of pesticide applicators for response costs or natural resource damages, [and] we know of no instances in which imminent hazard authority has been invoked to address consequences of pesticide application . . .

Thus, S. 1516 responds to farmers' on-going concern aobut *potential liability, especially liability* for comtaminated ground water, but not actual or even expected Federal actions against farmers.

The provision in S. 1516, while exempting farmers from liability, does not provide that any other entity, in lieu of the farmer, must respond to environmental damage resulting from pesticide use. In the event of damage, the most likely persons to bear the costs of contaminated ground water would be the victims of the contamination.

The bill reported here by the Environment and Public Works Committee contains a provision to exempt agricultural producers (farmers) from liability under Federal environmental statutes if the producers meet specified conditions designed to encourage responsible actions in compliance with labeling instructions and applicable law. When a farmer has followed labeling instructions for the use of a pesticide and has otherwise acted responsibly, liability is imposed on those who tested, labeled, and marketed the product, that is, the registrants of the pesticide and of ingredients in the pesticide. Any other responsible party udner existing Federal law remains liable, also.

Specifically, the bill exempts an agricultural producer from liability under Federal environmental laws for the release or threatened release of a pesticide resulting from "actions relating to the mixing, loading, applying, storage, disposal, and farm-to-farm transport of the pesticide" by the producer if the producer 1) submits a certification to the Administrator that the application was in compliance with labeling instructions and applicable law, 2) includes in the certification information relating to the use of the pesticide, and 3) keeps records, for each pesticide application, of information required to be submitted in the certification. The requirement for recordkeeping becomes effective three months after the date of enactment in order to allow time for farmers to be notified of the requirement.

The exemption would not apply where a producer acted negligently, recklessly, or not in accordance with the label or other applicable law.

The certification must contain the following information:

(A) the date of purchase of the pesticide;
(B) the date of application;
(C) the commercial name of the pesticide;
(D) the method of application;
(E) the total quantity applied;
(F) the rate of application;
(G) the total area treated; and
(H) the location of the treated areas.

In order to assure greater reliability in the certification, records containing the above information must be created contemporaneously with a pesticide application and must be kept for a period of time to be determined by the Administrator.

The exemption in no way affects liability under State law, whether common or statutory, or under Federal law, other than Federal environmental law. Nor is the provision intended to influence States in their decisions regarding liability under their own laws.

The section does not affect provisions of Federal environmental laws that authorize the prohibition or limitation of the use of pesticides, nor does it confer or restrict any private right of action.

The concerns which led to this legislation are specifically for the cost of cleaning up contaminated ground water and have not reached to other damages which may be caused by pesticide releases. Therefore, the bill addresses the expressed concern by defining the term "liability" as "any obligation to clean up, respond to, or otherwise abate contamination or threatened contamination of ground water."

Section 4. Storage and Disposal

The bill includes new provisions for the storage and disposal of pesticides, including products which have been suspended or cancelled because of significant environmental risks.

Typically a pesticide product is registered for a variety of uses under conditions which are specified on the label. If the Administrator then determines that a registered use presents an unreasonable environmental risk (which includes effects on human health), the registration for that use may be cancelled or the label may be modified to impose further conditions.

Under current law, a pesticide which has been cancelled for use may become the property of the Federal Government and the Environmental Protection Agency is required under some circumstances to indemnify the registrant for the costs of the product and any costs to store the pesticide after cancellation. EPA may also be required to pay for disposal.

On September 28 the Senate passed and sent to the President S. 659, a bill that will reduce the indemnification responsibilities of the Government for cancelled pesticides. Under S. 659 indemnification will only be provided if the Congress specifically appropriates funds for that purpose. Furthermore, registrants will only be com-

pensated for some portions of the cost of storing (prior to disposal) a pesticide which has been suspended or cancelled.

To implement this new approach for handling cancelled or suspended pesticides, S. 659 provides EPA with new authority to regulate the storage and disposal of cancelled pesticides. This new authority is of concern to the Committee on Environment and Public Works as it might be interpreted to modify the applicability of existing provisions of the Solid Waste Disposal Act (RCRA), although a "savings" clause specifically preserving the applicability of RCRA is included in the legislation.

Generally, cancelled pesticides which will be disposed are hazardous wastes and are subject to the storage, transportation and disposal provisions of subtitle C of the Solid Waste Disposal Act. Section 4 of the bill reported here is specifically intended to preserve all authorities of RCRA would currently apply and to further limit the storage and disposal of banned pesticides.

There are gaps in the existing RCRA structure. For instance, if a registrant intends to reformulate, relabel, export, or convert a cancelled pesticide to another product, the material is arguably not a waste and not subject to RCRA. To fill this and other gaps, new authority may be necessary. However, additional authority can be developed so as not to diminish the protection afforded by RCRA.

The legislation reported here by the Committee on Environment and Public Works includes the basic approach to storage and disposal included in S. 659 with the following additions—

—a new provision clearly states that storage and disposal procedures are to assure protection of human health and the environment;

—a legislative clarification is added to assure that nothing in the new provision is to in any way diminish the requirements of RCRA that are applicable;

—a requirement is included prohibiting storage of a pesticide for longer than 180 days unless the owner certifies to the Administrator that the product is to be reformulated or otherwise used or indicates that the pesticide will be disposed; and

—a requirement is included limiting storage of a pesticide product to no longer than 36 months unless the Administrator determines that pesticide stocks scheduled for disposal cannot be disposed because adequate disposal capacity is not available before such date.

Section 5. Definition of Pesticide

Public concern and the attenton of the Committee has been focused on the presence of nitrate in drinking water supplies and its potential adverse effect on human health. One source of nitrate contamination is application of commercially-produced fertilizer products.

Some fertilizer producers have responded to the ground water contamination problem by developing formulations which will reduce the leaching of nitrates to ground water. There are a variety of methods available to reduce nitrate leaching which include slow-release fertilizers—products that are designed to inhibit the conversion of nitrogen in the product to nitrates in the soil until such time as the crop can make use of the nitrates. The conversion

from nitrogen to nitrate occurs as a result of bacterial action in the soil. Some slow-release fertilizer formulations use an anti-bacterial agent to retard the conversion holding nitrogen in the root zone until a later period in the growing season.

The bill as reported by the Committee contains a modifications of section 2(u) of the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. 136 (u)). The provision is intended to allow the continued development and use of slow-release fertilizers.

Section 104 of S. 1516, as reported by the Committee on Agriculture, Nutrition, and Forestry amends the definition of pesticides in FIFRA to include any substance or mixture of substances intended for use as an antimicrobial agent. This provision might be interpreted to require the separate registration under FIFRA of a fertilizer product containing a bacteriostatic or other nitrogen loss inhibitor. Section 106 of S. 1516 would add a definition to FIFRA for "antimicrobial" that includes "bacteriostats intended to inhibit the growth of bacteria in the presence of moisture." Without modification, these provisions may inadvertently discourage the development of controlled-release fertilizers as they may be implemented to require the registration of fertilizer mixtures under FIFRA.

The Committee concluded there is little, if any, additional benefit to be gained from requiring a second registration of a bacteriostat which is used in plant nutrients when the purpose for adding such inhibitors to fertilizer is to delay the conversion of nitrogen to nitrate. Human health and the environment should be adequately protected with a single registration.

The amendment to FIFRA contained in section 5 of the bill reported here does not mandate the registration of substances used in a fertilizer mixture, if they would not otherwise be required to be registered because they are not intended for pesticidal applications. Section 5 is simply intended to prevent a second registration requirement for fertilizer mixtures containing a substance which is already registered as a pesticide and is specifically authorized by such registration for use in a fertilizer product as a pesticidal agent.

Section 6. Retention of State Authority

Under the Federal Food, Drug, and Cosmetic Act (FDCA) the Environmental Protection Agency has authority to establish the maximum amount of a pesticide residue that can occur in food. Implicit in current provisions of the FDCA is the authority of States to establish residue levels for pesticides on raw and processed foods that are sold within their borders. Products that contain residues of the pesticide in excess of those established by a State may not be sold in that State.

In two well-publicized instances in the past five years States have exercised their authority to regulate pesticide residues in the face if inaction or inadequate action by EPA.

In 1984 EPA suspended the use of ethylene dibromide (EDB) on grain and fruits, an action the Agency took after it determined that there was sufficient evidence to conclude that use of EDB presented an imminent and substantial hazard to public health. Up until 1984, EPA had not set tolerances for residues of EDB in food despite warnings by other government agencies of the cancer-caus-

ing characteristics of EDB residues. In the absence of EPA action on residues (prior to the cancellation), a few States had established tolerances on their own. When EPA did, later, announce a recommended action level, some of these States retained their own lower standard, which has been set at levels determined to protect public health.

A more recent case is that of the pesticide daminozide, also known as Alar, which is used as a plant growth regulator on apple crops. Based on evidence that daminozide and its degradation product are carcinogenic, EPA began a special review and in 1985 announced its intention to cancel all food use registrations. In 1986 the Agency changed its position and announced its decision to permit continued use of daminozide, at reduced levels, pending acquisition of new data.

Infants and children, who often eat proportionately greater amounts of apple products than adults, are a population of special concern with respect to daminozide. In view of EPA's about-face, Massachusetts established substantially lower tolerances than those of EPA for apple products sold in that State. The State of Maine also proposed that no residues of daminozide be allowed in baby food or heat-processed food. Whether or not as a result of the actions of these States, some major retailers and processors of apple products announced that they will no longer buy apples treated with daminozide.

These are just two examples of States' justifiably acting independent of EPA. There are not many cases of this type, nor is there reason to believe there will be many in the future, unless EPA completely abdicates its role to protect the public health. Nevertheless, preserving the right of States to determine that regulations more stringent than those proposed by EPA are needed is an important safeguard for public health.

The authority of States to regulate pesticides more strictly than Federal requirements has been challenged in the last Congress and again in this one. In 1986, the Senate voted, 45–34, to delete a provision from FIFRA legislation that preempted State authority to establish more stringent standards for pesticide residues. The House that year passed a bill that included such a provision. Ultimately, no FIFRA amendments were enacted.

It is in the context of these challenges to States' authority to protect the health and welfare of their residents that the Environment and Public Works Committee adopted this provision that explicitly affirms existing law. The provision maintains the authority of States and local subdivisions to exercise independent judgment over the levels of pesticide residues in food that are to be considered safe, so long as State or local standards are at least as stringent as standards established by the Federal Government.

Section 7. Study of Abandoned Wells

One of the problems that is closely associated with pesticide contamination of ground water supplies is the problem of abandoned wells. An abandoned well can serve as a conduit for surface run-off and contaminated ground water in the upper reaches of an aquifer to move quickly to points where it can pollute drinking water wells. Reliable estimates indicate that the number of abandoned

water supply wells may exceed 2 million. In addition there are several hundred thousand wells that have been drilled for the production of oil and gas or the injection of wastes. Many of the oil and gas wells are now regulated by State programs which includes provisions for capping and closure before abandonment. However, wells abandoned in earlier periods may continue to present a threat to ground water.

Closing and capping abandoned wells may be quite expensive. Information available to the Committee indicates that water production wells are capped and closed at an average cost of approximately $1,200. This does not include the expense of surveys and investigations to locate wells that are not readily identified.

Section 7 of the bill requires EPA to study the problem of abandoned wells and to report to the Congress no later than May 1, 1989. The report is to include information on the number and regional distribution of abandoned wells, the ground water impacts which may result including discussion of known instances of ground water contamination and procedures and programs which may be effective in closing and capping abandoned wells.

One approach that has been proposed is to require that each land owner conduct a survey for abandoned wells before property is sold. Property surveys at the time of sale are routine events already. If abandoned wells are found by the survey the owner would be required to close the wells before the title to the property is transferred to the new owner. EPA is specifically directed to review requirements of this type to determine whether they would be feasible and cost effective in preventing further damage to ground water resources as the result of abandoned wells.

Hearings

On June 10, 1988 the Committee on Environment and Public Works held a hearing on S. 1419, a bill entitled the Ground Water Safety Act, S. 1516, a bill to amend the Federal Insecticide, Fungicide, and Rodenticide Act and issues related to the contamination of ground water by pesticides.

Witnesses at the hearing included; Dr. John A. Moore, Assistant Administrator for Pesticides and Toxic Substances, U.S. Environmental Protection Agency; Stuart Z. Cohen, Biospherics, Inc., Beltsville, Maryland; James Combs, Iowa Department of Natural Resources, Des Moines, Iowa; Alice Parker, Women Involved in Farm Economics, Royal City, Washington; James Bell, American Soybean Association, Clarksville, Tennessee; Andrew J. Klein, Monsanto Company, St. Louis, Missouri; Cheryl Cook, National Farmers Union, Washington, D.C.; Janet Hathaway, Natural Resources Defense Council, Washington, D.C.; Velma Smith, Environmental Policy Institute, Washington, D.C.; and Dr. Jack Early, National Agricultural Chemicals Association, Washington, D.C.

Rollcall Votes

Section 7(b) of Rule XXVI of the Standing Rules of the Senate and the rules of the Committee on Environment and Public Works require that any roll call votes taken during the consideration of a bill be announced in the report on the bill.

On July 14, 1988, the Committee on Environment and Public Works met to markup this legislation. The Committee approved the proposed legislation with amendments retaining the right of States to set standards for pesticides on food more stringent than those established by the Federal Government and authorizing a study of abandoned wells as a contributing source of ground water contamination. The legislation and amendments were approved by voice vote.

Evaluation of Regulatory Impact

In compliance with section 11(b) of Rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact of the report bill.

The regulatory effects of the bill are limited to section 2 (with respect to ground water contamination) and section 4 (with respect to the storage and disposal of banned pesticides).

There are approximately 50,000 pesticide products registered for use in the United States containing 600 active and 1,200 inert ingredients and manufactured by 30 major manufacturers, 100 smaller producers and 3,300 formulators. Revenue from pesticide sales are approximately $6 billion annually.

Approximately 60 to 100 of the active ingredients may be classified as potential leaching pesticides and, pursuant to section 2, the bill would require the registrants of these pesticides to conduct monitoring at a representative number of sites. The average sampling well (of which 3 to 7 may be required at each location) may cost form $2,000 to $12,000 to establish and individual samples (taken approximately quarterly) may cost from $50 to $500 for analysis. It is not expected that sampling, even for a widely used pesticide, would be required at more than 10 to 20 locations. Requirements for providing health and environmental effects data, including data on the fate and transport of a pesticide in ground water, at the time of registration or reregistration are already in palce. In the event that use of a pesticide is restricted as the result of ground water contamination, the costs of the restriction will fall on the user in the form of lost productivity or increased production costs. Should pesticides be detected in ground water as a result of the required monitoring, the registrant will be required to report information on the detection to the Environmental Protection Agency, a paperwork burden that does not exist under current law.

Section 4 of the bill also may impose new costs on the registrants of pesticides for storage and disposal of the product stocks in the event that use is suspended and canceled on an emergency basis. Under current law, the Federal Government is required to indemnify the registrant of a banned pesticide and take possession of any stocks of the product which must then be stored and disposed at Government expense. The reported legislation modifies the current allocation of responsibilities. The registrant will be required to develop safe storage and disposal methods for each pesticide product at the time of registration or reregistration. The Government and the registrant will share the cost of storage. And the registrant will bear the full cost of disposal. It is difficult to estimate the economic impact of these modifications, as pesticide products have only been

banned on an emergency basis in four cases and disposal has not been completed in every instance. However, it is clear that the costs of storage and disposal will vary over a wide range and may be substantial for a large volume pesticide product having no other use which must be incinerated to protect human health and environment.

States may be expected to develop new pesticide management programs as a result of this legislation. The programs are authorized by section 2 and are intended to protect ground water from contamination by pesticides. Programs would require approval by the Environmental Protection Agency. Application of pesticides with a potential to leach to ground water would be prohibited (with exceptions) in States which failed to develop programs. The legislation authorizes $25 million in grants annually to support up to 50 percent of the cost of developing and implementing State management programs. No impacts on local governments should occur as the result of this legislation.

The bill makes no changes in law with respect to the privacy of individuals.

COST OF LEGISLATION

Section 403 of the Congressional Budget and Impoundment Control Act requires that each bill contain a statement of the cost of such bill prepared by the Congressional Budget Office. The report of the Budget Office on this legislation follows.

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, August 2, 1988.

Hon. QUENTIN N. BURDICK,
Chairman, Committee on Environment and Public Works,
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the attached cost estimate for the Ground Water Safety Act.

If you wish further details on this estimate, we will be pleased to provide them.

Sincerely,

JAMES L. BLUM,
Acting Director.

CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

1. Bill number: Not yet assigned.
2. Bill title: Ground Water Safety Act.
3. Bill status: As ordered reported by the Senate Committee on Environment and Public Works, July 14, 1988.
4. Bill purpose: The Ground Water Safety Act would amend the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and the Safe Drinking Water Act to address the contamination of groundwater by pesticides. The bill would direct the Environmental Protection Agency (EPA) to prevent contamination of drinking water through the pesticide registration and reregistration processes. In addition, the bill would define federal and state roles for site-specific responses to detected contamination and would mandate

the implementation of a comprehensive information management system to aid in site-specific response. For the purposes of carrying out federal groundwater protection activities, the bill would authorize the appropriation of $20 million for each of the fiscal years 1989–1993.

Section 2 of the bill would require the states to develop and implement a program to prevent pesticide contamination of groundwater. State programs would have to be approved by the EPA, which would have the authority to provide grants of up to one-half of the states' development and implementation costs. The bill would authorize the appropriation of $25 million for each of the fiscal years 1989–1993 for such grants.

Section 4 would authorize the EPA to regulate the storage, disposal and transportation of pesticides. This section would also specify procedures for the recall of suspended and cancelled pesticides and would establish federal and private responsibilities for the subsequent storage and disposal of existing inventories.

5. Estimated cost to the Federal Government:

[By fiscal year, in millions of dollars]

	1989	1990	1991	1992	1993
Authorization level	45	45	45	45	
Estimated outlays	29	41	44	45	45

The costs of this bill fall within budget function 300.

Basis of Estimate

For the purposes of this estimate, it is assumed that the Ground Water Safety Act will be enacted by October 1, 1988 and that the full amounts authorized will be appropriated for each fiscal year. Outlays have been estimated on the basis of historical spending for similar programs and on information obtained from the EPA.

Section 4 would change relative federal and private responsibilities for storage and disposal costs when a pesticide is suspended and cancelled. Under current law, the EPA is required to accept and dispose of inventories held by pesticide owners if requested to do so. Upon acceptance of a chemical, the agency is responsible for all of the costs related to its disposal, including interim storage if disposal is delayed.

In contrast, for recalls taking place after enactment of this bill, the EPA would no longer assume responsibility for the destruction of recalled pesticides and would only be required to pay a portion of the owner's storage costs pending disposal. If pesticide recalls are ordered in the future, federal obligations under the amended act would almost certainly be less burdensome than if governed by current law. Potential savings are substantial. For example, in the case of one cancelled pesticide, Silvex/2,4,5–T, the EPA has already incurred disposal and related costs of about $5 million and will probably spend at least an additional $4 million before disposal has been completed. The agency has spent approximately $3 million to date on the disposal of a second pesticide, ethylene dibromide (EDB), and may need additional funding of nearly $29 million to

complete the porject. Disposal costs for Dinoseb, a third substance that is currently undergoing final cancellation proceedings, are expected to be much greater—possibly exceeding $150 million. If the amendments made by Section 4 had been in effect in these three cases, most of these expenses would have been avoided. Future savings as a result of these provisions are likely, but depend on EPA's future cancellation actions and therefore cannot be reliably projected.

6. Estimated cost to State and local governments: Under the provisions of Section 2, states would have to develop and implement programs to prevent contamination of underground drinking water sources by locally used pesticides. States that fail to gain EPA approval of a plan would face the possible prohibition of certain pesticides' use within their borders. CBO estimates that states would spend up to $50 million a year on groundwater protection activities if Congress appropriates $25 million a year for grants. If less is appropriated, states may spend less but would probably have to spend at least $25 million to meet the bill's requirements. In some cases, this money would have been spent anyway, because the program mandated by the bill is very similar to that which the EPA is currently encouraging the states to develop. Some states are in the process of implementing groundwater programs or have begun to budget for them. For these states, little or no additional cost would be incurred.

7. Estimate comparison: None.

8. Previous CBO estimate: On May 13, 1988, CBO prepared a cost estimate for S. 1516, the Federal Insecticide, Fungicide, and Rodenticide Reform Act of 188, as ordered reported by the Senate Committee on Agriculture, Nutrition, and Forestry, April 20, 1988. Several titles of that bill (including title 16, dealing with storage and disposal and title 23, dealing with groundwater protection) are similar to provisions in the Ground Water Safety Act. Differences in the provisions are reflected in the estimates.

9. Estimate prepared by: Deborah Reis.

10. Estimate approved by: C.G. Nuckols (for James L. Blum, Assistant Director for Budget Analysis).

Changes in Existing Law

In compliance with section 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill as reported are shown as follow: Existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman:

The Federal Insecticide, Fungicide, and Rodenticide Act as Amended

An Act (86 STAT. 973-999)

To amend the Federal Insecticide, Fungicide, and Rodenticide Act, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may

be cited as the "Federal Environmental Pesticide Control Act of 1972."

* * * * * * *

SEC. 2. (a) * * *

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(u) PESTICIDE.—The term "pesticide" means (1) any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, [and] (2) any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant[:], *and (3) any substance or mixture of substances intended for a purpose described in section (ff): Provided,* That the term "pesticide" shall not include any article (1)(a) that is a "new animal drug" within the meaning of section 201(w) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321(w)), or (b) that has been determined by the Secretary of Health, Education, and Welfare not to be a new animal drug by a regulation establishing conditions of use for the article, or (2) that is an animal feed within the meaning of section 201(x) of such Act (21 U.S.C. 321(x)) bearing or containing an article covered by clause (1) of this proviso[.], *or (3) that is a mixture of a nitrogen-containing substance and a bacteriostat containing substantial quantities of nutrients which is not intended for preventing, destroying, repelling or mitigating any pest except bacteria that contributes to nitrification, provided that the bacteriostat used in the mixture is registered as a pesticide under this Act and bears end-use labeling instructions which do not prohibit use of the bacteriostat in such a mixture and the mixture is delivered to the user with a copy of such labeling and a statement specifying the presence of the bacteriostat in the mixture.*

* * * * * * *

SEC. 19. DISPOSAL AND TRANSPORTATION.

[(a) PROCEDURES.—The Administrator shall, after consultation with other interested Federal agencies, establish procedures and regulations for the disposal or storage of packages and containers of pesticides and for disposal or storage of excess amounts of such pesticides, and accept at convenient locations for safe disposal a pesticide the registration of which is canceled under section 6(c) if requested by the owner of the pesticide.

[(b) ADVICE TO SECRETARY OF TRANSPORTATION.—The Administrator shall provide advice and assistance to the Secretary of Transportation with respect to his functions relating to the transportation of hazardous materials under the Department of Transportation Act (49 U.S.C. 1657), the Transportation of Explosives Act (18 U.S.C. 831-835), the Federal Aviation Act of 1958 (49 U.S.C. 1421-1430, 1472 II), and the Hazardous Cargo Act (46 U.S.C. 170, 375, 416).

[(c) PROVISIONS FOR UNUSED QUANTITIES.—Notification of cancellation of any pesticide shall include specific provisions for the disposal of the unused quantities of such pesticide.]

SEC. 19. STORAGE, DISPOSAL, TRANSPORTATION AND RECALL.

(a) Storage, Disposal, and Transportation.—

(1) Data requirements and registration of pesticides.—The Administrator may require under section 3 or 6 that—

(A) the registrant or applicant for registration of a pesticide submit or cite data or information regarding methods for the safe storage and disposal of excess quantities of the pesticide to support the registration or continued registration of a pesticide;

(C) issue requirements and procedures for the disposal of any pesticide the registration of which has been canceled.

(3) CONTAINERS, RINSATES AND OTHER MATERIALS.—The Administrator may by regulation, or as part of an order issued under section 6 or an amendment to each an order—

(A) issue requirements and procedures to be followed by any person who stores or transports any container of a pesticide the registration of which has been suspended or canceled, any rinsate containing the pesticide, or any other material used to contain or collect excess or spilled quantities of the pesticide;

(B) issue requirements and procedures to be followed by any person who disposes of stocks or any container of a pesticide the registration of which has been suspended, any rinsate containing the pesticide, or an other material used to contain or collect excess or spilled quantities of the pesticide; and

(C) issue requirements and procedures for the disposal of any container of a pesticide the registration of which has been canceled, any rinsate containing the pesticide; or any other material used to contain or collect excess or spilled quantities of the pesticide.

(4) ADDITIONAL REQUIREMENT.—Requirements and procedures established under this subsection shall assure protection of human health and the environment and shall not be interpreted, construed or applied to alter or diminish in any way requirements and procedures which may be applicable under the Solid Waste Disposal Act (42 U.S.C. 6901 et seq.) to any pesticide product stocks or containers of a pesticide, any rinsate containing the pesticide or any material used to contain or collect excess or spilled quantities of a pesticide. Any pesticide product the registration of which has been suspended or canceled shall be deemed a hazardous waste subject to the Solid Waste Disposal Act (41 U.S.C. 6901 et seq.) unless within one hundred and eighty days of the date of suspension or cancellation, the owner of such pesticide product shall have certified to the Administrator that the product is to be relabeld, reformulated, exported or otherwise used as a commercial product. No stocks of a pesticide the registration of which has been suspended or canceled shall be stored for a period exceeding thirty-six months after the date of suspension or cancellation: Provided, That, for such products that are deemed hazardous waste, the Administrator may, following a determination that adequate disposal capacity is not available to dispose of such stocks, estabish an alternative date for disposal.

(b) RECALLS.—

(1) IN GENERAL.—If the registration of a pesticide has been suspended and canceled under section 6, and if the Administrator finds that recall of the pesticide is necessary to protect health or the environment, the Administrator shall order a recall of the pesticide in accordance with ths subsection.

(2) VOLUNTARY RECALL.—If, after determining under paragraph (1) that a recall is necessary, the Administrator finds that voluntary recall by the registrant and others in the chain of distribution may be as safe and effective as a mandatory recall, the Administrator shall request the registrant of the pesticide to submit, within sixty days of the request, a plan for the voluntary recall of the pesticide. If such a plan is requested and submitted, the Administrator shall approve the plan and order the registrant to conduct the recall in accordance with the plan unless the Administrator determines, after an informal hearing, that the plan is inadequate to protect human health or the environment.

(3) MANDATORY RECALL.—If, after determining under paragraph (1) that a recall is necessary, the Administrator does not request the submission of a plan under paragraph (2) or finds such plan to be inadequate, the Administrator shall issue a regulation that prescribes a plan for the recall of the pesticide. A regulation issued under this paragraph may apply to any person who is or was a registrant, distributor, or seller of the pesticide, or any successor in interest to such a person.

(4) RECALL PROCEDURE.—A regulation issued under this subsection may require any person that is subject to the regulation to—

(A) arrange to make available one or more storage facilities to receive and store the pesticide to which the recall program applies, and inform the Administrator of the location of each such facility;

(B) accept and store at such a facility those existing stocks of such pesticide that are tendered by any other person who obtained the pesticide directly or indirectly from the person that is subject to such regulation;

(C) on the request of a person making such a tender, provide for proper transportation of the pesticide to a storage facility; and

(D) take such reasonable steps as the regulation may prescribe to inform persons who may be holders of the pesticide of the terms of the recall regulation and how those persons may tender the pesticide and arrange for transportation of the pesticide to a storage facility.

(5) CONTENTS OF RECALL PLAN.—A recall plan established under this subsection shall include—

(A) the level in the distribution chain to which the recall is to extend, and a schedule for recall; and

(B) the means to be used to verify the effectiveness of the recall.

(6) REQUIREMENTS OR PROCEDURES.—No requirements or procedures imposed in accordance with paragraph (2) or (3) of subsection (a) may require the recall of existing stocks of the pesticide except as provided by this subsection.

(c) STORAGE COSTS.—

(1) SUBMISSION OF PLAN.—A registrant who wishes to become eligible for reimbursement of storage costs incurred as a result of a recall prescribed under subsection (b) for a pesticide whose registration has been suspended and canceled shall, as soon as practicable after the suspension of the registration of the pesticide, submit to the Administrator a plan for the storage and disposal of the pesticide that meets criteria established by the Administrator by regulation.

(2) REIMBURSEMENT.—Within a reasonable period of time after such storage costs are incurred and paid by the registrant, the Administrator shall reimburse the registrant, on request, for—

(A) none of the costs incurred by the registrant before the date of submission of the plan referred to in paragraph (1) to the Administrator;

(B) 100 per centum of the costs incurred by the registrant after the date of submission of the plan to the Administrator or the date of cancellation of the registration of the pesticide, whichever is later, but before the approval of the plan by the Administrator;

(C) 50 per centum of the costs incurred by the registrant during the one-year period beginning on the date of the approval of the plan by the Administrator or the date of cancellation of the registration of the pesticide, whichever is later;

(D) none of the costs incurred by the registrant during the three-year period beginning on the three hundred and sixty-sixth day following approval of the plan by the Administrator or the date of cancellation of the registration of the pesticide, whichever is later; and

(E) 25 per centum of the costs incurred by the registrant during the period beginning on the first day of the fifth year following the date of the approval of the plan by the Administrator or the date of cancellation of the registration of the pesticide, whichever is later, and ending on the date that a disposal permit for the pesticide is issued by a State or an alternative plan for disposal of the pesticide in accordance with applicable law has been developed.

(d) ADMINISTRATION OF STORAGE, DISPOSAL, TRANSPORTATION, AND RECALL PROGRAMS.—

(1) VOLUNTARY AGREEMENTS.—Nothing in this section shall be construed as preventing or making unlawful any agreement between a seller and buyer of any pesticide or other substance regarding the ultimate allocation of the costs of storage, transportation, or disposal of a pesticide.

(2) RULE AND REGULATION REVIEW.—Section 15(a)(4) shall not apply to any regulation issued under subsection (a)(2) or (b).

(3) LIMITATIONS.—No registrant shall be responsible under this section for a pesticide the registration of which is held by another person. No distributor or seller shall be responsible under this section for a pesticide that the distributor or seller did not hold or sell.

(4) SEIZURE AND PENALTIES.—If the Administrator finds that a person who is subject to a regulation or order under subsection (a)(2) or (b) has failed substantially to comply with that regulation or order, the Administrator may take action under section 13 or 14 or obtain injunctive relief under section 16(c) against such person or any successor in interest of any such person.

(c) CONTAINER DESIGN.—

(1) PROCEDURES.—

(A) Not later than three years after the effective date of this subsection, the Administrator shall, in consultation with the heads of other interested Federal agencies, promulgate regulations for the design of pesticide containers that will promote the safe storage and disposal of pesticides.

(B) The regulations shall assure, to the fullest extent practicable, that the containers—

(i) accommodate procedures used for the removal of pesticides from the containers and the rinsing of the containers;

(ii) facilitate the safe use of the containers, including elimination of splash and leakage of pesticides from the containers;

(iii) facilitate the safe disposal of the containers; and

(iv) facilitate the safe refill and reuse of the containers.

(2) COMPLIANCE.—The Administrator shall require compliance with the regulations referred to in paragraph (1) not later than five years after the effective date of this subsection.

(f) PESTICIDE RESIDUE REMOVAL.—

(1) PROCEDURES.—

(A) Not later than three years after the effective date of this subsection, the Administrator shall, in consultation with the heads of other interested Federal agencies, promulgate regulations prescribing procedures and standards for the removal of pesticides from containers prior to disposal.

(B) The regulations may—

(i) specify, for each major type of pesticide container, procedures and standards providing for, at a minimum, triple rinsing or the equivalent degree of pesticide removal;

(ii) specify procedures that can be implemented promptly and easily in various circumstances and conditions;

(iii) provide for reuse, whenever practicable, or disposal of rinse water and residue; and

(iv) be coordinated with requirements for the rinsing of containers imposed under the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6901 et seq.).

(C) Nothing in this subsection shall affect the authorities or requirements concerning pesticide containers under the Resource Conservation and Recovery Act of 1976.

(D) the Administrator may, at the discretion of the Administrator, exempt products intended solely for household use from the requirements of this subsection.

(2) COMPLIANCE.—Effective beginning five years after the effective date of this subsection, a State may not exercise primary enforcement responsibility under section 26, or certify an applicator under section 4, unless the Administrator determines that the State is carrying out an adequate program to assure compliance with this subsection.

(g) PESTICIDE CONTAINER STUDY.—

(1) STUDY.—

(A) The Administrator shall conduct a study of options to encourage or require—

(i) the return, refill, and reuse of pesticide containers;

(ii) the development and use of pesticide formulations that facilitate the removal of pesticide residues from containers; and

(iii) the use of bulk storage facilities to reduce the number of pesticide containers requiring disposal.

(B) In conducting the study, the Administrator shall—

(i) consult with the heads of other interested Federal agencies, State agencies, industry groups, and environmental organizations; and

(ii) assess the feasibility, costs, and environmental benefits of encouraging or requiring various measures or actions.

(2) REPORT.—Not later than two years after the effective date of this subsection, the Administrator shall submit to Congress a report describing the results of the study required under paragraph (1).

* * * * * * *

SEC. 31. PROTECTION OF GROUND WATER.

(a) PURPOSE.—It is the purpose of this section to establish standards, regulations and requirements that will prevent contamination of underground sources of drinking water by pesticides and to authorize and require the Administrator of the Environmental Protection Agency to take appropriate regulatory and other actions to protect human health and the environment from injury or damage that may result from the presence of pesticides in ground water.

(b) DEFINITIONS.—For purposes of this section—

(1) DRINKING WATER WELL.—The term "drinking water well" means a well or spring supplying water for human consumption;

(2) GROUND WATER.—The term "gound water" means water below the land surface in the zone of saturation;

(3) GROUND WATER RESIDUE GUIDANCE LEVEL.—The term "ground water residue guidance level" means—

(A) with respect to a pesticide for which a ground water residue guidance level has been established under section 1429 of the Safe Drinking Water Act, such level, or

(B) with respect to any other pesticide which has been detected at 3 or more ground water sampling points, 5 micrograms per liter;

(4) GROUND WATER SAMPLING POINT.—The term "ground water sampling point" means a public or community water supply, a private water supply, a spring, or a monitoring well or other ground water source, if the well or source is reasonably designed and of adequate depth to permit the collection of ground water smaples;

(5) PESTICIDE.—The term "pesticide" includes any active or inert ingredient of a pesticide product and the metabolites and degradation products of such ingredients;

(6) RELIABLE ANALYTICAL DATA.—The term "reliable analytical data" means information indicating the presence of a pesticide in a ground water sample at or above the limit of detection and developed according to generally recognized standards and good laboratory practices for sampling and analysis of pesticides in ground water; and

(7) UNDERGROUND SOURCE OF DRINKING WATER.—The term "underground source of drinking water" includes current and potential sources of drinking water and means an aquifer or its portion which:

(A) supplies any drinking water well; or

(B) contains ground water of sufficient quantity and quality, taking into account the availability of feasible treatment and recovery technologies, potentially to supply a public water system or drinking water well and contains fewer than 10,000 mg/l total dissolved solids.

(c) LEACHING POTENTIAL.—

(1) CRITERIA.—The Administrator shall publish and seek comment on criteria to determine whether a pesticide has the potential to leach into ground water. Such criteria may include, but are not limited to, factors such as: the intended use of the pesticide; the timing, rate, and method of application for the pesticide; the mobility of the pesticide in soil and water under various conditions; the persistence of the pesticide in the environment; the use of the pesticide in combination with other agents; and the level of care necessary to assure that the pesticide is properly used. The Administrator may take into account relevant information provided by the Soil Conservation Service of the United States Department of Agriculture regarding the mobility of pesticides in soil and water under various conditions.

(2) DATA SUBMISSION.—Each person seeking to registe or reregister a pesticide under this Act shall submit complete and adequate data and information with respect to the potential for the pesticide to leach into ground water and the fate and transport of the pesticide.

(3) DETERMINATION OF LEACHING POTENTIAL.—At the time of the initial registration of a pesticide or upon issuing a reregistration standard for a pesticide (and using the criteria developed under paragraph (1)) the Administrator shall determine whether the pesticide has the potential to leach into ground water. The Administrator may take into account relevant information provided by the Soil Conservation Service of the United States Department of Agriculture in making such determination. With respect to a determination made under this para-

graph, any pesticide detected at three or more ground water sampling points shall be determined to have the potential to leach into ground water. Any determination that a pesticide does not have the potential to leach into ground water made under this paragraph shall be amended, if the Administrator receives reliable analytical data that the pesticide has been detected at three or more ground water sampling points.

(4) AUTHORITY TO DENY REGISTRATION.—Nothing in this section shall be interpreted, construed or implied to authorize the Administrator to register or reregister a pesticide for use, if, in the judgement of the Administrator, the requirements of section 3(c)(5) are not satisfied.

(d) RECOMMENDED PRACTICES.—If the Administrator determines that a pesticide has the potential to leach into ground water according to the provisions of subsection (c) of this section, the registrants of the pesticide shall develop management practices designed to prevent, to the maximum extent practicable, the potential for the pesticide to leach into ground water. In developing such practices the registrants shall consult with the Administrator, the United States Department of Agriculture, and with agencies of the various States which have been designated pursuant to subsection (p) to develop and implement programs to prevent contamination of underground sources of drinking water and shall provide such agencies any information necessary to carry out such programs. The registrant shall disseminate information on such management practices as recommended practices to applicators and other persons using the pesticide in a form that will facilitate use of the management practices. Such recommended practices may include, but are not limited to, practices with respect to—

(1) the purposes for and the location at which the pesticide should be used, considering factors such as environmentally sensitive areas and conditions;

(2) the rate at which the pesticide should be applied;

(3) the time or frequency of pesticide use;

(4) the method of pesticide application, storage, handling or disposal;

(5) the appropriate training of pesticide applicators and other persons using the pesticide;

(6) the appropriate response if the pesticide is spilled or otherwise released in a manner likely to significantly increase the potential for leaching to ground water.

The recommended practices required by this subsection shall be in addition to label requirements that are imposed under this Act to assure that use of the pesticide will not present an unreasonable risk of damage or injury to human health or the environment.

(e) MONITORING.—In addition to any monitoring which may be required under section 3(c)(2)(B) of this Act, monitoring shall also be conducted pursuant to the following authorities.

(1) LEACHING PESTICIDES.—If the Administrator determines that a pesticide has the potential to leach into ground water according to the provisions of subsection (c) of this section, the registrants of the pesticide shall conduct ground water monitoring at representative geographical and hydrogeologic areas associated with locations where the pesticide is to be used and

under conditions of concern and for such time as determined by the Administrator. Monitoring by a registrant of a pesticide pursuant to this paragraph shall be conducted according to generally recognized standards and good laboratory practices (which may be identified by the Administrator) for sampling and analysis of pesticides in ground water taking into account seasonal and other factors which may effect the fate and transport of pesticides in soil and ground water.

(2) CONTINUING REGISTRATION.—

"(A) If, in the judgment of the Administrator, additional data on the presence of a pesticide in ground water are required to maintain in effect an existing registration of the pesticide, registrants of such pesticide shall conduct ground water monitoring.

(B) The design and the scope of the monitoring requirement should take into account information such as the magnitude and frequency of detection, pattern of pesticide use and soil types involved in the detection, physical and chemical properties of the pesticide, rainfall patterns, well construction, rates of degradation, reliability and analytical accuracy of the detection, and results of State or other sponsored monitoring.

(C) To the extent feasible, monitoring should be conducted at representative geographical and hydrogeologic areas associated with locations and conditions of concern as determined by the Administrator.

(3) AREAWIDE MONITORING.—Notwithstanding any other provision of this Act, if the Administrator (or the designated State agency) determines, based on reliable analytical data, that—

(A) a pesticide has been detected in an underground source of drinking water;

(B) the concentration of the pesticide equals or exceeds 50 per centum of the ground water residue guidance level for that pesticide or, on the basis of reliable analytical data as to a specific site, the Administrator determines that there is a likelihood that the ground water residue guidance level for that pesticide will be reached or exceeded at that site; and

(C) the presence of the pesticide in the underground source of drinking water may be the result of use of the pesticide in accordance with the label or widespread and commonly recognized practice;

the Administrator (or the designated State agency) may require registrants of the pesticide to conduct monitoring within the vicinity of the underground source of drinking water. The purpose of such monitoring shall be to determine the extent of pesticide contamination of ground water and the geographic area that will be subject to the use prohibition under subsection (i) and, to the extent feasible, to determine the cause of the contamination.

(4) SAVINGS CLAUSE.—Nothing in this section shall limit the authority of any State or political subdivision thereof to require ground water monitoring by a registrant at any location within that State or subdivision.

(f) NOTIFICATION.—

(1) REQUIREMENT.—When a registrant of a pesticide obtains reliable analytical data that the pesticide has been detected at any ground water sampling point, the registrant shall file a report containing such information within fifteen working days with the Administrator, the State where such pesticide has been detected, the owner of the property at the ground water sampling point, and any other person relying upon the underground source of drinking water for drinking water or household needs. An additional report shall be filed in the same manner and with the same persons whenever a registrant of a pesticide obtains reliable analytical data that the pesticide has been detected as a concentration which reaches or exceeds the ground water residue guidance level for that pesticide.

(2) CONTENT OF REPORT.—A report required under paragraph (1) shall contain information known to the registrant on the level detected, frequency of detection, location (including depth), date, well construction, soil type, the analytical method used, including information on the precision, accuracy, and limit of detection of the method and any quality assurance and control procedures and such other information as the Administrator may specify.

(3) OTHER INFORMATION.—The Administrator may receive reports of such information from any other person and if such information is received by the Administrator it shall be transmitted by the Administrator to the designated agency in each State where the pesticide has been detected and to the owner of the property at the ground water sampling point.

(g) REVIEW FOR FURTHER ACTION.—On receiving information of a detection of a pesticide at any ground water sampling point, the Administrator shall promptly review the information to determine the reliability of the detection and to determine whether action should be taken to protect ground water resources.

(h) REGISTRATION AMENDMENTS.—

(1) REQUIREMENT.—

(A) After reviewing reliable analytical data, the Administrator shall determine whether there is a reasonable likelihood that the ground water residue guidance level for a pesticide will be reached or exceeded in underground sources of drinking water in different localities as a result of uses of the pesticide in accordance with the labeling on the pesticide or as a result of widespread and commonly recognized practice.

(B) If the Administrator determines that there is a reasonable likelihood of reaching or exceeding such level in different localities, the Administrator shall within sixty days propose and require as expeditiously as practicable amendments to the registration of the pesticide with respect to which the determination has been made which will assure that the use of the pesticide in accordance with the amended registration will not cause the ground water residue guidance level to be reached or exceeded in underground sources of drinking water. Amendments to the registrationof a pesticide made pursuant to this subparagraph

may be required by informal rulemaking according to the provisions of title 5 of the United States Code or as the result of proceedings conducted pursuant to section 6 of this Act.

(C) The Administrator shall make public any determination (including information on which such determination was based) under subparagraph (A).

(D) If the Administrator proposes to require registration amendments under this paragraph, the Administrator shall notify registrants of such amendments and shall publish notice of the determination in the Federal Register.

(2) CONSULTATION.—In taking action under paragraph (1), the Administrator shall notify the Secretary of Agriculture and the designated agency in any Stae where the pesticide (with respect to which the determination is made) has been detected in any ground water sampling point and the designated agency in each other State in which there is significant use of the pesticide or potential for use. The Administrator shall provide each designated State agency with information relevant to the determination. Designated State agencies shall promptly provide the Administrator with information (including information on the actions which the State intends to take under any prevention program approved pursuant to section 32 of this Act) relevent to taking action under this section and shall make recommendations regarding necessary registration amendments with respect to that State.

(3) REASONABLE LIKELIHOOD.—

(A) The Administrator shall determine that there is a reasonable likelihood that the ground water residue guidance level for a pesticide will be reached or exceeded whenever such pesticide is detected in amounts which exceed 25 per centum of such level unless, considering the other factors described in subparagraph (B) of this paragraph, the Administrator determines that there is not a reasonable likelihood that such level will be exceeded as a result of use of the pesticide in accordance with the labeling on the pesticide or as a result of widespread and commonly recognized practice.

(B) Notwithstanding subparagraph (A), the Administrator may, on the basis of compelling evidence, including information on the frequency and time of occurrance at the site of detection and elsewhere, use patterns, soil types, physical and chemical properties of the pesticide, rainfall patterns, will construction, analytical accuracy, and rates of degradation determine that the ground water residue guidance level for a pesticide will not be reached or exceeded. The Administrator shall make available a statement supporting any determination made under this subparagraph and shall publish notice of the availability of such statement in the Federal Register.

(4) SCOPE OF AMENDMENTS.—

(A) Amendments to the registration of a pesticide required pursuant to this section may include—

(i) limitations on the purposes for and location at which the pesticide may be used, considering factors such as environmentally sensitive areas and conditions;

(ii) limitations on the rate at which the pesticide is applied;

(iii) limitations on the time of frequency of pesticide use;

(iv) limitation on the method of pesticide application, storage, handling, or disposal;

(v) reporting or other requirements, including lable changes or changes in classification;

(vi) requirements for the training or certification of pesticide applicators or other persons using the pesticide;

(vii) required site-specific responses; or

(viii) any other requirement under this Act to ensure that the ground water residue guidance level for such pesticide will not be reached or exceeded.

(B) The amendments to the registration of a pesticide should, to the extent feasible, be directed to the same or similar uses of the pesticide, similar or potentially more vulnerable geographical and hydrogeologic areas and other similar conditions that led to the determination under subparagraph (A) or (B) of paragraph (1).

(C) In taking regulatory action under this subsection, the Administrator may utilize recommendations provided by the designated State agencies under paragraph (2).

(5) REVIEW.—If the Administrator has imposed registration amendments on the use of a pesticide according to the provisions of this subsection, the Administrator shall—

(A) Periodically review reliable analytical data on the occurrence of the pesticide at ground water sampling points representative of the locations at which the pesticide is used to determine whether such amendments are effective in meeting the requirements of paragraph (1) of this section;

(B) require additional registration amendments, if such amendments are necessary to assure that the ground water residue guidance level for such pesticide will not be reached or exceeded in underground sources of drinking water;

(C) report to the Congress and transmit the report to the States at thirty-six months, sixty months, and ninety-six months after such amendments are first imposed indicating whether the amendments have been effective whether the amendments have been effective in meeting the requirements of paragraph (1) of this subsection and describing any additional actions which are being taken by the States pursuant to section 32 to prevent contamination of underground sources of drinking water.

(i) SITE-SPECIFIC RESPONSE.—

(1) REQUIREMENT.—

(A) if the Administrator determines that a pesticide is present in an underground source of drinking water at a concentration that reaches or exceeds 50 per centum of the

ground water residue guidance level for such pesticide, the Administrator shall—

(i) notify the designated agency for the State in which the underground source of drinking water is located of the determination of the Administrator; and

(ii) provide the designated State agency with information relevant to the determination.

(B) The State shall take action within one hundred and eighty days of such notification (or receipt of information from other sources indicating that such concentration has been reached or exceeded) to prevent any adverse effect on human health or the environment which may result from the presence of such pesticide. The State shall take appropriate action with respect to the sale or use of pesticide detected at such underground source of drinking water to bring and retain concentration of the pesticide at or below the ground water residue guidance level applicable to the pesticide.

(2) ACTION BY THE ADMINISTRATOR.—

(A) If—

(i) a State does not have the authority to take action required by paragraph (1) of this subsection with respect to a pesticide detected in a drinking water well or fails to take such action within the time period prescribed by such paragraph;

(ii) a pesticide is present in a drinking water well in the State at a concentration that reaches or exceeds 50 per centum of the ground water residue guidance level; and

(iii) the presence of the pesticide may be the result of use in accordance with the labeling or of widespread and commonly recognized practice,

the Administrator shall issue an order prohibiting the use of the pesticide in the vicinity of the drinking water well or take such other action, including but not limited to issuing such orders as may be necessary to protect human health or the environment (including an order that the registrant provide water treatment facilities or alternative water supplies) or commencing civil or criminal action for appropriate legal, equitable or other relief to assure that the concentration of the pesticide in the drinking water well will not reach or exceed the ground water residue guidance level for such pesticide.

(B) The Administrator shall publish notice of the action in the Federal Register and take appropriate steps to inform all registrants, potentially affected persons, and interested members of the public. Such notice shall specify the factual findings and conclusions relief on in support of the decision.

(C) The Administrator shall promulgate regulations which shall govern and define prohibitions ordered under this paragraph. Such regulations shall include a formula or other method to be used in determining the land area over which any prohibition ordered under this section shall

extend. Such formula or method shall be designed to facilitate an expeditious and definitive determination of such land area using readily available data and may reflect factors including, but not limited to, climate and soil characteristics, hydrogeologic conditions and the concentrations of the pesticide detected at ground water sampling points within the area. The regulations shall provide for a countrywide prohibition on use of a pesticide whenever such pesticide has been detected at 50 per centum of the ground water residue guidance level at five or more different locations within the county, unless the Governor of the State shall designate a region within the county containing such locations which is more appropriate. Any judicial review of regulations promulgated pursuant to this subparagraph shall be obtained under section 16(b) of this Act and application for review shall be made within sixty days of promulgation. Regulations promulgated pursuant to this subparagraph shall not be subject to judicial review in any civil or criminal proceeding resulting from the application of the formula on a site-specific basis.

(D) The Administrator shall provide reasonable procedures for a petition to modify or terminate the action of the Administrator under this paragraph, if the concentration of the pesticide in the water from the drinking water well no longer reaches or exceeds 50 per centum of the applicable ground water residue guidance level and will likely remain below such level.

(j) INFORMATION ON PESTICIDES IN GROUND WATER.—The Administrator shall collect and make available through a public information file information concerning the detection of pesticides at any ground water sampling point. The file may summarize for each pesticide that has been detected in ground water, based on reliable analytical data, whether the pesticide has been detected at a concentration that exceeds 25 per centum of the applicable ground water residue guidance level and whether the presence of the pesticide in ground water appears to have been caused by use of the pesticide in compliance with this Act.

(k) TECHNICAL ASSISTANCE TO STATES.—The Administrator shall provide technical information to a designated State agency for the purpose of implementing this section. The technical information shall include, but not be limited to, data on the toxicity, environmental fate, physical or chemical pesticide ingredient characteristics, predictive modeling, exposure, hydrogeologic conditions relative to areas specifically vulnerable to ground water contamination for the purpose of providing vulnerability mapping and other relevent subjects. In addition, the Administrator may provide information, to the extent reasonably available, on the alternative methods of pest control and on agricultural or other management practices that could minimize the presence of pesticide in ground water.

(l) SPECIAL REVIEW.—On receiving reliable analytical data that a pesticide has been detected above the ground water residue guidance level in ground water not in an underground source of drinking water or that pesticide concentrations which are detected below such level in an underground source of drinking water may have an ad-

verse effect on the environment as a result of discharge to surface water, the Administrator may initiate a public interim administrative review under section 3(c)(8) of this Act to determine whether the pesticide may cause unreasonable adverse effects on the environment from such use.

(m) MONITORING IN THE UNSATURATED ZONE.—The Administrator shall undertake research activities to develop and demonstrate techniques to monitor the presence of pesticides in the unsaturated zone and to develop models that are predictive of the potential for leaching of pesticides to ground water based on data gathered by monitoring in the unsaturated zone.

(n) SITE-SPECIFIC INFORMATION.—The Administrator shall enter into a memorandum of understanding with the Secretary of Agriculture, the Secretary of Commerce, and the Secretary of the Interior, for the purpose of initiating and developing information management systems and other techniques designed to make readily available to State and local officials and agricultural producers, applicators and other persons using the pesticide information on the soil, hydrology, climate and other characteristics at specific sites of pesticide application to be used by such officials and users in developing practices and making application decisions that will prevent the contamination of ground water by pesticides.

(1) Under the direction of the Administrator a council will be established in order to assist the Environmental Protection Agency in developing a site-specific pesticide information system. This council shall consist of experts on information management who have experience with information retrieval from the following agencies: The Environmental Protection Agency, the National Agricultural Library, the Soil Conservation Service, the United States Geological Survey, and the National Oceanographic and Atmospheric Administration. This council shall—

(A) review existing information retrieval and referral services which access information on soil, hydrology, climate, and other characteristics at specific sites important to pesticide application;

(B) determine what information relevant to making site-specific pesticide decisions is available to users of the pesticide products and designated State agencies directly from existing data banks; and

(C) develop and submit to the Administrator a plan for an information management system which would direct and assist users in gaining access to site-specific information available in printed and electronic form.

(2) The Environmental Protection Agency shall take the plans developed by the council into consideration when developing the site-specific pesticide information management system.

(o) EFFECT ON OTHER PROVISIONS.—

(1) Nothing in this section shall limit the authority of the Administrator under other provisions of this Act or any other law.

(2) Nothing in this section shall preclude or deny any right of any State or political subdivision thereof to adopt or enforce any regulation, requirement or standard that is more stringent

than a regulation, requirement or standard of performance in effect under this section or to preempt any State or local statute or common law with respect to liability for damages and injury caused by pesticides.

(p) DESIGNATED STATE AGENCIES.—Not later than ninety days after the date of enactment of this section, the Governor of each State shall designate the State agency (or agencies) which shall have the duty and responsibility to carry out the requirements of this section and section 32 of this Act.

(q) AUTHORIZATION.—For purposes of carrying out the provisions of this section there are authorized to be appropriated $20,000,000 for each of the fiscal years ending on September 30, 1989, 1990, 1991, 1992, and 1993. Of such amounts $2,500,000 in each fiscal year shall be available only to carry out the purposes of subsection (m).

SEC. 320 STATE PROGRAMS TO PREVENT GROUND WATER CONTAMINATED BY PESTICIDES.

(a) IN GENERAL.—Not later than twenty-four months after the date of enactment of this section, the Governor of each State (acting through the agency designated pursuant to section 31(p)) shall, after notice and opportunity for public comment, prepare and submit to the Administrator for approval a program to prevent contamination of underground sources of drinking water by pesticides which the Administrator has determined to have the potential to leach to ground water pursuant to section 31 of this Act. Such program shall include—

(1) an inventory of the pesticides used in the State which may cause or contribute to the contamination of underground sources of drinking water;

(2) an identification of the areas (including information on the crops, climate, soil characteristics, hydrological conditions, and pesticide application practices in such areas) where such pesticides are used and information with respect to contamination of underground sources of drinking water which may have already occurred;

(3) an identification of the process, including intergovernmental coordination and public participation, the State will use to develop and implement management practices that would be effective in preventing contamination of underground sources of drinking water by such pesticides;

(4) a schedule for the implementation of such practices and identification of the methods the State will use to assure that such practices are employed in the use of the pesticides which may cause or contribute to the contamination of underground sources of drinking water at the earliest practicable date; and

(5) a response program implementing section 31(i) of this Act adequate to assure that contamination of underground sources of drinking water by pesticides will not occur at concentrations which reach or exceed ground water residue guidance levels established under section 1429 of the Safe Drinking Water Act.

(b) PUBLIC PARTICIPATION.—Each State shall establish procedures including, but not limited to, the establishmment of technical and citizens' advisory committees, to encourage public participation in developing the prevention programs required by this section. The

procedures shall include notice and opportunity for public hearing and comment on the State program before it is submitted to the Administrator.

(c) APPROVAL OF STATE PROGRAMS.—Not later than one hundred and eighty days after the date of submission of any State program under this section, the Administrator shall either approve or disapprove such program. The Administrator shall disapprove a program if the Administrator determines that—

(1) the proposed program does not include each of the elements specified in subsection (a);

(2) adequate authority does not exist or adequate resources are not available at the State level to implement the program;

(3) the schedule for implementing the program is not sufficiently expeditious; or

(4) the practices and measures proposed in such program are not adequate to prevent the exceedance of ground water residue guidance levels established for pesticides used in the State and found in underground sources of drinking water.

If the Administrator disapproves a proposed program, the State shall be notified in writing of any modifications which are necessary to obtain approval. The State shall thereupon have an additional three months to submit a revised program which shall be subject to approval or disapproval according to the provisions of this subsection. Whenever the Administrator determines after public hearing that a State is not administering and enforcing a prevention program approved pursuant to this subsection in accordance with the provisions of this section, the Administrator shall so notify the State and, if appropriate action to bring such program into compliance with this section is not taken within ninety days, the Administrator shall withdraw approval of such prevention program. The Administrator shall not withdraw approval of any such prevention program unless the State shall have been notified and the reasons for withdrawal shall have been stated in writing and made public.

(d) FAILURE TO SUBMIT AN APPROVABLE PROGRAM.—

(1) IN GENERAL.—After forty-eight months after the date of enactment of this section, no pesticide which has the potential to leach to ground water (as determined pursuant to section 31 of this Act) may be used in a State under this Act unless the Administrator has approved (and not withdrawn) under this section a program submitted by the State to prevent the contamination of underground sources of drinking water by pesticides.

(2) EMERGENCY EXEMPTION.—Notwithstanding the provisions of this subsection, the Administrator may grant an emergency exemption under the provisions of section 18 for the use of a pesticide that would otherwise be prohibited under paragraph (1).

(e) FINANCIAL ASSISTANCE.—The Administrator may make grants, subject to such terms and conditions as the Administrator determines appropriate, to any State for the purpose of developing and implementing a water pollution prevention program under this section. The Federal share shall not exceed 50 per centum of the cost of developing and implementing any State program under this section.

Any grant to a State made after three years after the date of enactment of this section shall be made only on the condition that the State is making adequate progress in implementing the program approved according to the schedule set forth pursuant to subsection (a)(4).

(f) EFFECT ON OTHER LAW.—Except as provided in subsection (d), nothing in this section shall be interpreted to limit the authority of the Administrator of any State under other provisions of this Act or under any other law.

(g) AUTHORIZATION.—There are authorized to be appropriated to carry out the purposes of this section not to exceed $25,000,000 for each of the fiscal years ending September 30, 1989, 1990, 1991, 1992, and 1993.

[SEC. 31] SEC. 33. AUTHORIZATION FOR APPROPRIATIONS.

There is authorized to be appropriated such sums as may be necessary to carry out the provisions of this Act for each of the fiscal years ending June 30, 1973, June 30, 1974, and June 30, 1975. The amounts authorized to be appropriated for any fiscal year ending after June 30, 1975, shall be the sums hereafter provided by law.

There are hereby authorized to be appropriated to carry out the provisions of this Act for the period beginning October 1, 1975, and ending September 30, 1976, the sum of $47,868,000 and for the period beginning October 1, 1976, and ending September 30, 1977, the sum of $46,636,000, and for the period beginning October 1, 1977, and ending September 30, 1978, the sum of $54,500,000, and for the period beginning October 1, 1978, and ending September 30, 1979, such sums as may be necessary, but not in excess of $70,000,000.

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THE SAFE DRINKING WATER ACT AS AMENDED BY THE SAFE DRINKING WATER ACT AMENDMENTS OF 1986

(Public Law 99-339, June 19, 1986)

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PART C—PROTECTION OF UNDERGROUND SOURCES OF DRINKING WATER

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SEC. 1429. GROUND WATER RESIDUE GUIDANCE LEVEL.

(a) REQUIREMENT.—

(1) The Administrator, on the Administrator's own initiative, may issue a ground water residue guidance level for a pesticide registered under the Federal Insecticide, Fungicide, and Rodenticide Act. The Administrator shall issue a ground water residue guidance level for a pesticide at the time the Administrator initially registers the pesticide or upon issuing a reregistration standard for the pesticide under such Act if the Administrator determines that the pesticide has the potential to leach into ground water. In addition, the Administrator shall issue a ground water residue guidance level for a pesticide if—

(A) based on reliable analytical data, the pesticide has been detected at ground water sampling points in three different locations;

(B) based on reliable analytical data, the pesticide has been detected in a drinking water well or wellfield that serves a public water system; or

(C) a Federal agency or a State petitions the Administrator to set a ground water residue guidance level for the pesticide.

"(2)(A) If the Administrator has promulgated or promulgates a maximum contaminant level goal under section 1412 that applies to a pesticide, the ground water residue guidance level required under paragraph (1) for the pesticide shall be set at such level, unless a more stringent level is necessary to protect the environment, within thirty days of being required under such paragraph.

(B) Notwithstanding the provisions of subparagraph (A), the Administrator may set the gound water residue guidance level for a pesticide at a level equivalent to the maximum contaminant level for such pesticide, if—

(i) it is determined that there is likely to be no threshold for the chronic adverse health effects of the pesticide;

(ii) the maximum contaminant level has been set at a level which reduces the risk of carcinogenic effects resulting from exposure to the pesticide, considering both its presence in drinking water at such level and other exposures including dietary exposure, to no more than one in one million as determined in accordance with the Guidelines for Carcinogenic Risk Assessment published by the Administrator;

(iii) the maximum contaminant level has been set at a level which reduces the risk of other chronic health effects to a negligible level with an adequate margin of safety for groups of sensitive individuals and other subpopulations; and

(iv) a more stringent level is not necessary to prevent significant environmental harm.

(C) If a maximum contaminant level or maximum contaminant level goal that would be applicable to a pesticide for which a ground water residue guidance level is required by paragraph (1) has not been established under section 1412, the Administrator shall issue a ground water residue guidance level for such pesticide at a level at which no known or anticipated adverse effect on the health or persons occur and including an adequate margin of safety (taking into consideration the nature of the toxic effects caused by the pesticide, and the validity, completeness, and adequancy of data about the pesticide) unless a more stringent level in necessary to protect the environment. If all required chronic, oncogenicity, reproduction, neurotoxicity, or teratogenicity data are absent or invalid for the pesticide, the gound water residue guidance level for the pesticide shall be set at the limit of detection. If any required chron-

ic, oncogenicity, reproduction, neurotoxicity, or teratogenicity data are absent or invalid for the pesticide, the ground water residue guidance level for the pesticide shall include an additional margin of safety that takes into account the absence of such data.

(3) If the Administrator is required under paragraph (1) to issue a ground water residue guidance level for a pesticide and the ground water residue guidance level is to be issued pursuant to paragraph (2)(C), the Administrator shall issue such level within one hundred and eighty days after it is required pursuant to paragraph (1) and may issue an interim guidance level for use as an advisory during such one-hundred-and-eighty-day period.

(4) The Administrator may revise a ground water residue guidance level for a pesticide. The Administrator shall allow at least thirty days for public comment on any proposed revision.

(5) An interim ground water residue guidance level shall not be subject to judicial review before the expiration of one hundred and eighty days after its issuance. Judicial review of any final ground water residue guidance level or failure to establish an interim or final ground water residue guidance level shall be governed by section 1448. A gound water residue guidance level established under paragraph (2) (A) or (B) shall not be subject to judicial review except that review of any action which sets a ground water residue guidance level at a level equivalent to a maximum contaminant level for a pesticide may be obtained under this Act to determine whether such action may present more than a negligible risk of chronic adverse health effects-or is otherwise inconsistent with paragraph (2)(B)(ii).

FEDERAL FOOD, DRUG, AND COSMETIC ACT

(TITLE 21, UNITED STATES CODE)

CHAPTER I—SHORT TITLE

SECTION 1. This Act may be cited as the Federal Food, Drug, and Cosmetic Act.

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CHAPTER IV—FOOD

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RETENTION OF STATE AUTHORITY

SEC. 413. Nothing in this Act shall preclude or deny the right of any State or political subdivision to establish or enforce any regulatory limit on residues of a pesticide chemical in or on food, except that if a residue level has been established by regulation under section 408 or 409 or if there exists a statement of the residue level below which enforcement action will not be taken under this Act, such State or political subdivision may not establish or enforce any limit that is less stringent than such residue level.

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